Form PTO-1390 (REV 10-95) U S DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER: **702-020501**

U S. APPLICATION NO. (If known, see 37 CFR 1 5): **10/088701**

INTERNATIONAL APPLICATION NO	INTERNATIONAL FILING DATE	PRIORITY DATES CLAIMED
PCT/NL00/00682	**22.09.00 (September 22, 2000)**	**22.09.99 (September 22, 1999)**

TITLE OF INVENTION: **LIFT-TRUCK**

APPLICANT(S) FOR DO/EO/US: **Johannes VAN VUUREN**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U S C 371

2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U S C 371

3. ☒ This express request to begin national examination procedures (35 U S C 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U S.C 371(b) and PCT Articles 22 and 39(1)

4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date

5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   - a ☐ is transmitted herewith (required only if not transmitted by the International Bureau)
   - b ☒ has been transmitted by the International Bureau
   - c ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)

6. ☐ A translation of the International Application into English (35 U S C 371(c)(2))

7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U S C 371(c)(3))
   - a ☐ are transmitted herewith (required only if not transmitted by the International Bureau)
   - b ☐ have been transmitted by the International Bureau
   - c ☐ have not been made, however, the time limit for making such amendments has NOT expired
   - d ☒ have not been made and will not be made.

8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S C 371(c)(3))

9. ☐ An oath or declaration of the inventor(s) (35 U S C. 371(c)(4))

10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U S C. 371(c)(5))

Items 11. to 16. below concern document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1 97 and 1.98

12. ☐ An assignment document for recording A separate cover sheet in compliance with 37 CFR 3 28 and 3 31 is included

13. ☒ A FIRST preliminary amendment

    ☐ A SECOND or SUBSEQUENT preliminary amendment

14. ☐ A substitute specification

15. ☐ A change of power of attorney and/or address letter.

16. ☒ Other items or information:
    - a WO 01/21523-Front Page with Abstract, Specification, Claims, Drawings and Search Report (27 pp.)
    - b. International Preliminary Examination Report With Annex (10 pp.)

U.S. APPLICATION NO (If known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO	ATTORNEY'S DOCKET NUMBER
10/088701	PCT/NL00/00682	702-020501

17. ☒ The following fees are submitted		CALCULATIONS PTO USE ONLY
BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):		
Search Report has been prepared by the EPO or JPO ...	$890.00	
International preliminary examination fee paid to USPTO (37 CFR 1 482)	$710.00	
No international preliminary examination fee paid to USPTO (37 CFR 1 482) but international search fee paid to USPTO (37 CFR 1 445(a)(2))	$740.00	
Neither international preliminary examination fee (37 CFR 1 482) nor international search fee (37 CFR 1 445(a)(2)) paid to USPTO. .	$1,040.00	
International preliminary examination fee paid to USPTO (37 CFR 1 482) and all claims satisfied provisions of PCT Article 33(2)-(4) . .	$100.00	

ENTER APPROPRIATE BASIC FEE AMOUNT =	$ 890.00	
Surcharge of **$130.00** for furnishing the oath or declaration later than ☐ 20 ☒ 30 months from the earliest claimed priority date (37 CFR 1 492(e))	$ 130.00	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	17 - 20	0	X **$18.00**	$ 0.00	
Independent claims	4 - 3 =	1	X **$84.00**	$ 84.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ **$280.00**	$ 0.00	
TOTAL OF ABOVE CALCULATIONS =				$ 1,104.00	
Reduction of 1/2 for filing by small entity, if applicable The above-identified applicants are entitled to claim Small Entity Status in the United States				$ 0.00	
SUBTOTAL =				$ 1,104.00	
Processing fee of **$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1 492(f)) +				$ 0.00	
TOTAL NATIONAL FEE =				$ 1,104.00	
Fee for recording the enclosed assignment (37 CFR 1 21(h)) The assignment must be accompanied by an appropriate cover sheet (37 CFR 3 28, 3 31) **$40.00** per property +				$ 0.00	
TOTAL FEES ENCLOSED =				$ 1,104.00	
				Amount to be: refunded	$
				charged	$

a. ☒ A check in the amount of **$1,104.00** to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of $ _____ to cover the above fees
A duplicate copy of this sheet is enclosed

c. ☒ The Assistant Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No 23-0650. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

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PATENT APPLICATION/PCT
Attorney's Docket No. 702-020501

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	
Johannes VAN VUUREN	:	**LIFT-TRUCK**
International Application No. PCT/NL00/00682	:	
International Filing Date 22 September 2000	:	
Priority Date Claimed 22 September 1999	:	
Serial No. Not Yet Assigned	:	
Filed Concurrently Herewith	:	

Pittsburgh, Pennsylvania
March 21, 2002

PRELIMINARY AMENDMENT

BOX PCT
Commissioner for Patents
Washington DC 20231

Sir:

Prior to initial examination, please amend the above-identified patent application as follows:

IN THE SPECIFICATION:

On page 1 of the specification after the title and before the first paragraph, please insert the following section heading:

BACKGROUND OF THE INVENTION

On page 1 of the specification before the fourth complete paragraph, please insert the following section heading:

BRIEF SUMMARY OF THE INVENTION

On page 3 of the specification before the fourth complete paragraph, please insert the following section heading:

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

On page 4 of the specification before the fifth complete paragraph which begins "A transporter according to figure 1", please insert the following section heading:

DETAILED DESCRIPTION OF THE INVENTION

IN THE CLAIMS:

Please cancel all pending claims and rewrite them as new claims 20-36 as follows:

20. A material carrier including a transporter for transporting material between said material carrier and a material destination situated at a busy location which is difficult to access, wherein the transporter comprises:

a frame part,

a support platform which is displaceable upward and downward relative to the frame part between an elevated position and a lowered position, wherein

a floor of said material carrier is provided with a recess substantially vertically accessible, and

the support platform corresponds to a peripheral profile of the recess so that at least a part of the upper surface of the support platform serves as a part of the floor of the material carrier.

21. The carrier according to claim 20 in which the transporter is provided with fixing means for fastening the transporter to the material carrier when the support platform is fitted in the floor of the material carrier.

22. The carrier according to claim 20, wherein the support platform is provided with at least one wheel, which wheel is mounted on the transporter so as to be foldable between a storage, non-use position and a position of use.

23. The carrier as claimed in claim 20, wherein the support platform takes a form such that it can be inserted into and removed from a pallet opening.

24. The carrier as claimed in claim 20, further comprising a fork-like support element arranged on the frame part, which fork-like element is arranged such that it extends forward under the support platform when in use.

25. The carrier as claimed in claim 24, wherein the fork element is provided on the front side with one or more rollers.

26. The carrier as claimed in claim 20, further provided with a source of energy for upward and downward displacement of the platform and/or forward/rearward displacement of the transporter.

27. The carrier as claimed in claim 20, provided with steering means for steering the transporter between a loading and unloading area.

28. The carrier as claimed in claim 20, wherein the fixing means comprise the platform and the fork-like support, wherein the fork-like support can be fixed under an opening of the freight carrier and wherein the platform can be fixed to the floor of the same freight carrier opening, so that the floor of the freight carrier is sandwiched between the fork support and the platform.

29. The carrier as claimed in claim 20, further comprising transporting means, preferably a pallet truck, which transporting means can be releasably coupled to the transporter.

30. The carrier as claimed in claim 20, wherein the fork element is displaceable up and downward by means of a piston rod mechanism mounted between the fork element and the frame part.

31. The carrier as claimed in claim 20, wherein the support comprises two protruding upper forks which are provided with locking holes.

32. The carrier as claimed in claim 20, comprising a locking mechanism which comprises two mutually opposite pivotable locking nose elements which are pivotable between a first locking position, wherein the nose elements extend into the holes of the upper forks of the transporter, and a second release position.

33. A method for transporting goods using a material carrier, comprising the steps of driving the material carrier to a parking area suitable for the purpose, placing the goods to be unloaded on the platform of a transporter, displacing the fork elements of the transporter downward until they come into contact with the ground, removing the transporter from the carrier opening and displacing the transporter platform downward, whereafter the transporter and the goods can be displaced to the desired location.

34. A method for transporting goods using a material carrier, comprising the steps of:

placing cargo from a loading space of the material carrier onto a transporter of which the top side of a support platform is smoothly accessed from the floor of the loading spaces;

displacing the transporter downward; and

driving away transporting means releasably coupled to the transporter.

35. A method for transporting goods using a transporter, for transporting material between a material carrier and a material destination, wherein the transporter comprises a frame part, a support platform which is displacable upward and downward on the frame part between elevated position and a lowered position, wherein, when lowered into an intermediate position, the support platform has a substantially flush connection, to the surface of the cargo container of the material carrier, comprising the steps of driving the freight carrier to a parking area suitable for the purpose, placing the goods to be unloaded on the platform of the transporter over said flush connection, removing the transporter from the material carrier and displacing the transporter platform downward, whereafter the transporter and the goods can be displaced to the desired location.

36. The method as claimed in claim 35, further comprising steps for placing the support platform of the transporter in a recess of a floor of the loading area of the material carrier.

ABSTRACT:

After the claims, please insert a page containing the Abstract Of The Disclosure, which is attached hereto as a separately typed page.

REMARKS

This Preliminary Amendment conforms the specification and the pending claims to customary United States practice.

Original claims 1-19 and amended claims 1-19 have been canceled and rewritten as new claims 20-36 in order to eliminate the multiple dependencies and to bring the claims into conformance with standard United States patent practice.

An Abstract Of The Disclosure has been added as a separately typed page to be inserted after the claims.

Examination and allowance of claims 20-36 are respectfully requested.

Respectfully submitted,

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LIFT-TRUCK

ABSTRACT OF THE DISCLOSURE

A transporter for transport of goods between a goods carrier and a destination, for example between a lorry and a shop which is situated in a narrow and difficult to access place, the transporter having: a frame part; a support platform which is movable upwards and downwards on the frame part between a raised position and a lowered position; where the transporter is equipped with a releasable fixing mechanism for fixing the transporter to a loading/unloading opening of the larger goods carrier, such as a lorry, in which fixed condition the transporter is transportable by the carrier.

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LIFT-TRUCK

The present invention relates to a transporter for transporting materials between a material carrier and a material destination on a freight carrier such as a truck, comprising such a transporter, and to a method for delivering goods at a busy destination difficult to access, such as a busy shopping street.

An ever increasing problem is the delivery of goods to shops which are situated in shopping streets which are busy and difficult to reach with a truck and which are not provided with sufficient parking and loading/unloading areas.

An object of the present invention is to alleviate this problem.

According to a first aspect of the present invention a transporter is provided for transporting material between a material carrier and a material destination, for instance between a truck and a shop situated at a busy location which is difficult to access, wherein the transporter comprises: a frame part and support platform which is displaceable upward and downward on the frame part between an elevated position and a lowered position, wherein the transporter is provided with releasable fixing means for releasably fixing the transporter to a loading/unloading opening of a larger material carrier, such as a truck, in which fixed situation the transporter can be transported by the carrier.

A truck provided with a transporter according to the present invention thus need no longer stand in front of the door of a shop with difficult access during loading and unloading which, in addition to the problem of reaching the shop and finding a parking space, often causes traffic jams. The truck can now park in a general

parking area, whereafter the transporter can be loaded with goods and then disconnected from the truck and the goods can be taken to the final destination on the transporter itself.

The platform of the transporter is preferably provided with one or more wheels, which wheels are mounted on the transporter so as to be foldable between a storage, non-use position and a position of use.

As the platform is provided with wheels, it is easy to manage and operate.

The platform preferably has a form such that it can fit in a recess of a floor of a larger material carrier such as a truck, wherein the platform can serve as a part of the floor of the carrier when fixed thereto.

Since the platform can serve as a part of the floor of a truck, it is very easy to carry goods from the truck onto the platform.

The support platform can take a form such that it can fit into and be removed from a pallet opening, whereby loading and unloading of the goods placed on the pallet is facilitated.

Further features of the present invention are stated in claims 5-12.

A second aspect of the present invention relates to a freight carrier comprising the above stated transporter, as according to claims 13-15.

With such a freight carrier larger quantities of cargo can be transported to a parking space, whereafter the cargo can be displaced by means of the transporter between the parking space and the shop difficult to access with a truck.

A third aspect of the present invention relates to a method for delivering goods using the above stated freight carrier, comprising the steps of driving the freight carrier to a parking area suitable for the purpose, placing the goods to be unloaded on the platform of the transporter, displacing the fork elements of the transporter downward until they come into contact with

the ground, removing the transporter from the carrier opening, displacing the transporter platform downward and folding out the wheels thereof to their position of use, whereafter the transporter and the goods can be displaced to the desired location.

A further aspect of the present invention relates to a method of transporting involving a material carrier such as a truck, a transporter as described and a third means of transport, such as a hand pallet truck, wherein cargo is driven out of a loading space of the carrier onto the platform of the transporter, whereafter the transporter with the cargo and the third means of transport are displaced, whereafter the cargo is driven off the platform with the third means of transport, and vice versa.

The third means of transport and/or the transporter can further be provided with securing means.

If provided with securing means, the third means of transport can be used to enclose the cargo at the rear side of the platform, so that during use of the transporter the cargo cannot fall off at the rear.

The present invention will now be described on the basis of the description hereinbelow which makes reference to the figures, in which:

figure 1 shows a perspective view of a preferred embodiment of the transporter according to the present invention;

figure 2 is a perspective view of a freight carrier plus transporter according to the present invention;

figure 3 shows a further partly cut-away perspective view of the transporter of figure 1;

figures 4 and 5 show partly cut-away perspective views of the transporter and truck according to the present invention during unloading of a pallet;

figure 6 is a perspective view of the transporter fixed to a truck;

figure 7 is a perspective view of a freight carrier plus another embodiment of the transporter according to the present invention;

figures 8 and 9 show further partly cut-away perspective views of the transporter, wherein this latter is enclosed in a truck;

figure 10 is a perspective view of a further embodiment of the transporter according to the present invention; and

figures 11 and 12 show partly cut-away perspective views of the releasable locking mechanism for releasably locking the transporter to for instance a truck.

A transporter according to figure 1 comprises a frame part 2, a housing 4 in which a motor (not shown) is housed, an upright displaceable carrier 6, a support platform 8 which is mounted on the carrier, two forks 10 extending from housing 4, which forks 10 are provided with rollers 12 at the front end thereof, two rear wheels 14 and a steering column 16.

Platform 8 is provided on a front end with a pivotable flap 18. Platform 8 is also provided with two fold-away wheels 20 which are mounted in wheel suspensions 22 which are in turn arranged pivotally in two length profiles 24 under platform 8.

A hydraulic piston rod mechanism 26 extends from beneath platform 8 and is arranged on a front end thereof below flap 18.

Carrier 6 is displaceable up and downward in frame part 2 whereby platform 8 is also displaceable up and downward.

In its lowered position the platform 8 makes contact with the surface of forks 10 (see figure 3). In this position the platform wheels 20 are folded away. If the piston rod is retracted, as in figure 3, the front end of flap 18 can touch the ground, in order to provide an easy transition between the ground and platform 8.

In its extended position the piston rod 26 ensures that flap 18 is in line with the platform (see figure 1).

In a position which is not shown, platform wheels 20 can come into contact with the ground in their folded-down position when the platform is in its lowered position, wherein wheels 20 serve as front wheels of transporter 1. In this situation the rollers 12 of forks 10 are no longer in contact with the ground.

Platform 8 and front flap 18 have a profile which fits into a recess 26 of floor 28 of the container space 30 of a truck 32 (see figures 2 and 4).

Transporter 1 can be fixed to the rear side of truck 32 by means of fixing means (not shown). In this fixed position the platform 8 and forks 10 engage the rear side 34 of truck 32. In this fixed state (figure 6) the transporter 1 is displaceable by means of the truck.

The container opening of the truck can be closed in this situation (see figure 6).

During use the truck and transporter can be driven to a parking area.

The rear side of the truck can then be opened, whereafter forks 10, rear wheels 14, housing 4, steering column 16 and frame part 2 of transporter 1 are lowered so that rear wheels 14 and front rollers 12 of forks 10 come into contact with the ground (see figure 4). A pallet truck 38 situated in the container space 30 of truck 32 can then be driven onto the platform 8 of the transporter.

Transporter 1 can then be manoeuvred away from truck 32 (see figure 5), whereafter wheels 20 of platform 8 can be folded down, platform 8 can be lowered and the transporter plus pallet truck 38 can be taken to their destination.

The embodiment shown in figure 7 has two upper forks 50 which are separated. A pallet can thus be directly loaded herewith. The pivotable wheels are here mounted on forks 50, wherein a platform is pushed over

the fork parts (and hooked on or otherwise fixed) as if it were a pallet.

It is then possible to utilize the platform and the transporter separately.

The platform can be used to cover the recess in the loading floor of the truck at floor level, even if the transporter is not being transported or if the transporter delivers a pallet directly on the forks.

The transporter with upper forks can be detached from the truck while the platform remains in the recess of the cargo container.

It is possible for the lower forks to be wider than the platform or the upper forks (and therefore not to be situated precisely under the platform).

It is possible for the lower forks to be roughly as wide as the external width of the truck.

It is possible for the platform to have about the same width as the internal width of the truck.

It is possible for one or more of the pivotable wheels to be directed transversely of the forks. During disconnection from the truck the transporter can then travel backward on the rollers and sideward on the pivotable wheels mounted on the platform.

The pivotable wheels can be folded away or folded down while the platform is loaded. The object of the fold-down wheels is to save space in combination with providing the option of being able to carry the cargo on the platform closer to the ground in respect of driving on and off for instance a hand pallet truck.

It is further possible for the whole transporter (including frame part) to be fixed in a recess in the contour of the cargo container, so that the transporter does not protrude at all outside the contour of the cargo container. When the loading space is closed the transporter lies wholly within the closed loading space in this embodiment and is protected against rain, theft and damage.

It is possible for the platform to be provided with (removable) (side) walls.

It is possible for the ramp (18) to be lockable in vertical position. This is to limit the dimension during use as transporter and/or to enclose the cargo.

The recess in the loading floor of the truck can be closed on the underside.

It is important that the top side of the platform or upper forks preferably has a substantially flush connection to the surface of the cargo container of the material carrier.

The whole transporter can fit into a recess of the (closed) loading space, even at the side of the loading space of the truck (see figures 8 and 9).

In a second preferred embodiment of transporter 100 as shown in figures 10-12, the lower forks 110 are displaceable up and downward in frame part 112 by means of a piston rod mechanism 114, which piston rod 114 is mounted on the lower side thereof on a bottom cross beam 115 of frame 112 and on the upper side thereof on a lying transverse upper part 116 of lower forks 110.

Upper forks 124, which are also provided with front wheels (not shown), extend from a cross beam 118 which is displaceable up and downward.

Cross beam 118 is provided on the end thereof with two upright sleeves 122 which are displaceable up and downward over two side arms 126 of frame 112.

A transverse frame beam 128 extends between the upper ends of side arms 126.

A piston rod assembly 130 is fixed at an upper end thereof to frame beam 128 and at a bottom end thereof to the cross beam 118 of upper forks 124. Upper forks 124 are in this way displaceable up and downward over frame 112.

Two recesses 132 corresponding with upper forks 124 can be found in the floor 136 of the truck.

The innermost end of upper forks 124 is provided with holes or slots 140 (see also figure 11).

The locking mechanism 142 is mounted between the recesses 132 in floor 136 of the truck.

Locking mechanism 142 has two opposite arms 144 which are provided with nose portions 146.

A spring 148 extends between the two arms 144.

Arms 144 are mounted pivotally on a rectangular body 150 which is provided on the front thereof with a rod 152, which rod 152 is mounted displaceably in a fixed block 154. This block 154 is fixed to the floor of the truck.

Each arm 144 is provided on the upper end thereof with two cables 156, which two cables 156 are guided through a triangular part 158 so as to come together as one cable 160 at the top of triangle 158. If cable 160 is pulled taut, the two cable 156 are also pulled taut and nose portions 146 of arms 144 are pulled inward, whereby these noses 146 are no longer found in the holes 140 of upper forks 124, whereafter the upper forks 124 can be detached.

When cables 156 are tensioned, the body 150 of coupling mechanism 142 is pushed downward by means of arms 144, whereby the rod 152 extends in a corresponding recess 162 of the truck floor.

When transporter 100 is mounted on the truck, the upper forks 124 push noses 146 of arms 144 inward until the noses drop into the holes 140 of upper forks 124, whereby the transporter is locked in the truck floor.

After locking of the transporter in the truck floor, the body 150 of locking mechanism 142 can be placed further forward relative to the truck floor recess, whereby the transporter is pulled further into the floor in order to effect a good positioning.

Transporter 100 can be locked to and released from the truck as follows:

The transporter can approach the container of the truck, so that upper forks 124 come roughly into line with recesses 132 of the floor of the truck.

Although it is desirable that upper forks 124 can approach the recesses 132 in one line, it will be apparent that, if this is not the case, the transporter can approach the truck "out of line" and that the attachment will then align itself.

The own weight of the transporter assists in finding the correct point of engagement in the floor recesses 132.

When the rod 117 of piston rod combination 114 is displaced upward, the lower forks 110 are pressed out relative to housing 4 in the direction of the ground, whereby transporter 100 inclines backward as a whole.

When lower forks 110 are raised relative to housing 4 as shown in figure 10, the transporter will incline forward as a whole.

Making use of this technical possibility, the point of support of the transporter can be displaced, during coupling and loading onto the truck, from the support at the front end of lower forks 110 to a point of support at the front ends of upper forks 124. The point of support at the front end of lower forks 110 is thus transferred during loading to the point of support at the front end of upper forks 124. It is thus impossible for the transporter to become suspended from the truck when they are locked to each other.

The transporter is then displaced forward until the upper forks are locked in the floor of the truck in the manner described above.

Complete locking is achieved after the housing and the lower forks are raised, as according to figure 6, whereafter the transporter is ready for displacement by means of the truck.

Release of the transporter is possible in reverse sequence. The transporter can only be released if the body 150 of coupling mechanism 142 is moved back (as shown in figure 12), and cables 156 and 160 are tightened.

The present invention is not limited to the above described preferred embodiment thereof; the rights sought are defined by the following claims, within the scope of which many modifications can be envisaged.

PCT/NL00/00682
Enclosed to letter dated 5 December 2001

Claims

1. Material carrier including a transporter for transporting material between said material carrier, such as a truck, and a material destination for instance a shop situated at a busy location which is difficult to access, wherein the transporter comprises:

- a frame part,
- a support platform which is displaceable upward and downward relative to the frame part between an elevated position and a lowered position, characterised in that
- a floor of said material carrier is provided with a recess substantially vertically accessible, and
- the support platform corresponds to a peripheral profile of the recess so that at least a part of the upper surface of the support platform serves as a part of the floor of the material carrier.

2. Transporter according to claim 1 in which the transporter is provided with fixing means for fastening the transporter to the material carrier when the support platform is fitted in the floor of the material carrier.

3. Transporter according to claim 1 or 2 wherein the support platform is provided with at least one wheel, which wheel is mounted on the transporter so as to be foldable between a storage, non use position and a position of use.

4. Transporter as claimed in any of the foregoing claims, wherein the support platform takes a form such that it can be inserted into and removed from a pallet opening.

5. Transporter as claimed in any of the foregoing claims, further comprising a fork-like support element arranged on the frame part, which fork-like

element is arranged such that it extends forward under the support platform when in use.

6. Transporter as claimed in claim 5, wherein the fork element is provided on the front side with one or more rollers.

7. Transporter as claimed in any of the foregoing claims, further provided with a source of energy for upward and downward displacement of the platform and/or forward/rearward displacement of the transporter.

8. Transporter as claimed in any of the foregoing claims, provided with steering means for steering the transporter between a loading and unloading area.

9. Transporter as claimed in any of the foregoing claims, wherein the fixing means comprise the platform and the fork-like support, wherein the fork-like support can be fixed under an opening of the freight carrier and wherein the platform can be fixed to the floor of the same freight carrier opening, so that the floor of the freight carrier is sandwiched between the fork support and the platform.

10. Transporter as claimed in any of the foregoing claims, further comprising transporting means, preferably a pallet truck, which transporting means can be releasably coupled to the transporter.

11. Transporter as claimed in any of the foregoing claims, wherein the fork element is displaceable up and downward by means of a piston rod mechanism mounted between the fork element and the frame part.

12. Transporter as claimed in any of the foregoing claims, wherein the support comprises two protruding upper forks which are provided with locking holes.

13. Material carrier as claimed in any of the foregoing claims, comprising a locking mechanism which comprises two mutually opposite pivotable locking nose

elements which are pivotable between a first locking position, wherein the nose elements extend into the holes of the upper forks of the transporter, and a second release position.

14. Use of a transporter as claimed in any of the claims 1-12 to transport goods between a freight carrier and an unloading area with difficult access.

15. Use of a material carrier as claimed in claims 1-13 to carry goods.

16. Method for transporting goods using a freight carrier as claimed in claims 1-15, comprising the steps of driving the freight carrier to a parking area suitable for the purpose, placing the goods to be unloaded on the platform of the transporter, displacing the fork elements of the transporter downward until they come into contact with the ground, removing the transporter from the carrier opening and displacing the transporter platform downward, whereafter the transporter and the goods can be displaced to the desired location.

17. Method for transporting goods using a freight carrier as claimed in any of the claims 1-15, comprising the steps of:

- placing cargo from a loading space of the freight carrier onto the transporter of which the top side of a support platform is smoothly accessed from the floor of the loading spaces;
- displacing the transporter downward; and
- driving away transporting means, for instance a pallet truck, releasably coupled to the transporter.

18. Method for transporting goods using a transporter, for transporting material between a material carrier and a material destination, wherein the transporter comprises a frame part, a support platform which is displacable upward and downward on the frame part between elevated position and a lowered position, wherein, when lowered into an intermediate position, the support platform have a substantially flush connection, to the surface of the cargo container of the material

carrier, comprising the steps of driving the freight carrier to a parking area suitable for the purpose, placing the goods to be unloaded on the platform of the transporter over said flush connection, removing the transporter from the material carrier and displacing the transporter platform downward, whereafter the transporter and the goods can be displaced to the desired location.

19. Method according to claims 18 further comprising steps for placing the support platform of the transporter in a recess of a floor of the loading area of the material carrier.

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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

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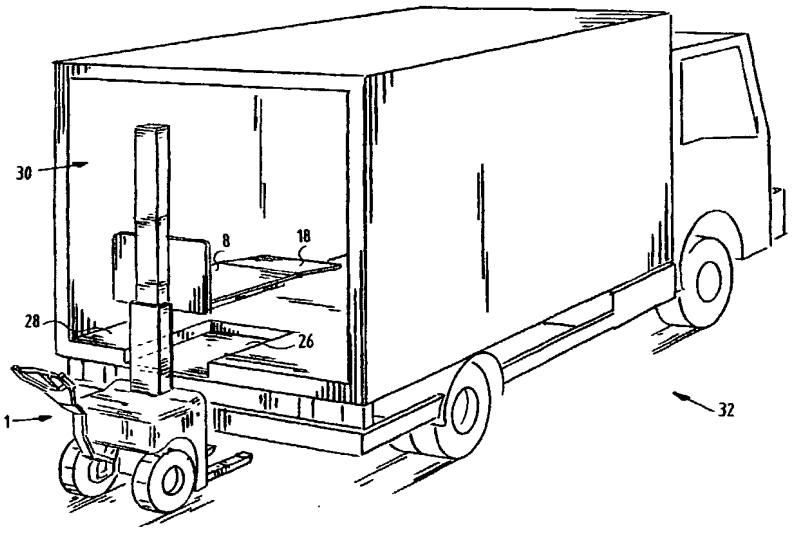
Published:
— *With international search report.*
— *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LIFT-TRUCK



(57) Abstract: Transporter (1) for transport of goods between a goods carrier (32) and a destination, for example between a lorry and a shop which is situated in a narrow and difficult to access place, the transporter comprising: a frame part (2); a support platform (8) which is movable upwards and downwards on the frame part between a raised position and a lowered position; where the transporter is equipped with a releasable fixing means for fixing the transporter to a loading/unloading opening of a larger goods carrier, such as a lorry, in which fixed condition the transporter is transportable by the carrier.

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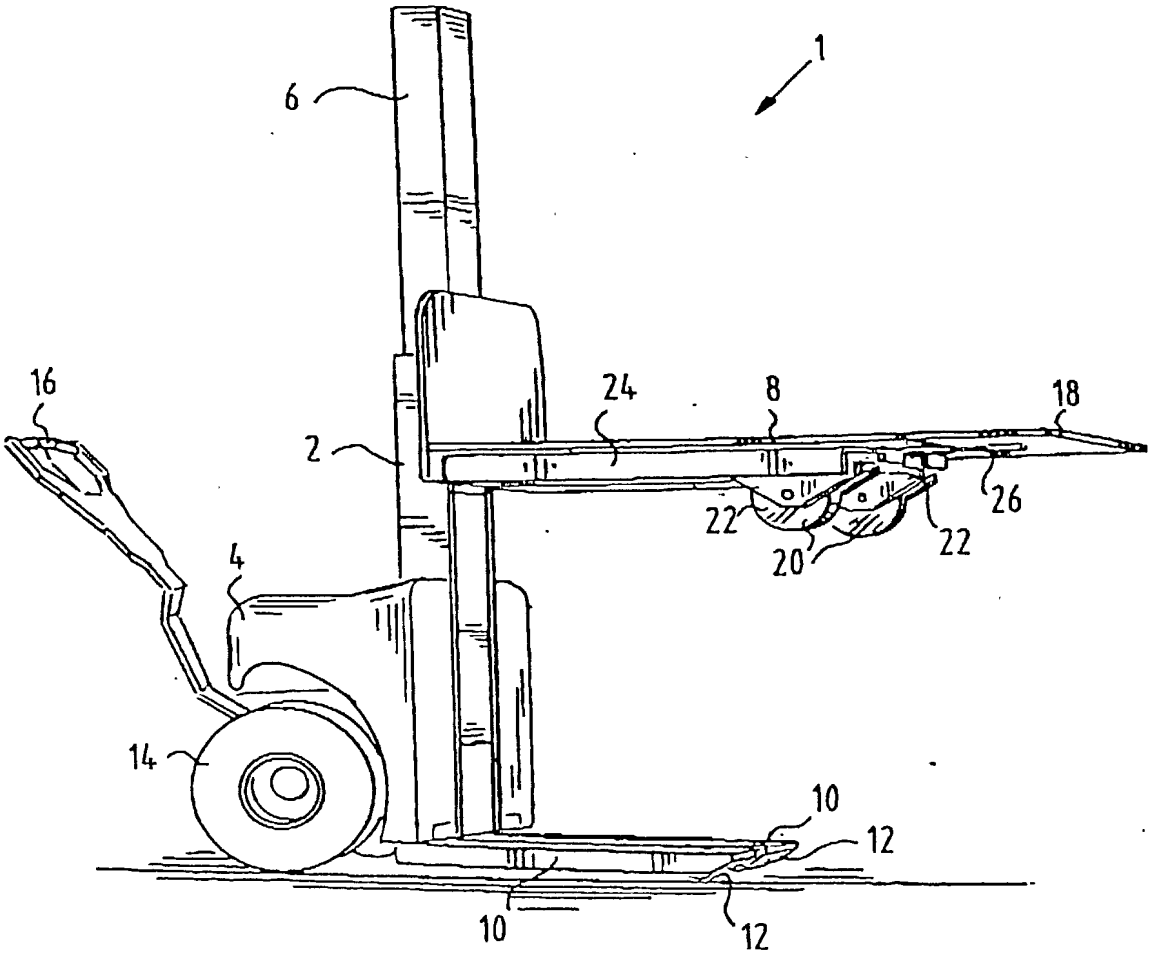


FIG.1

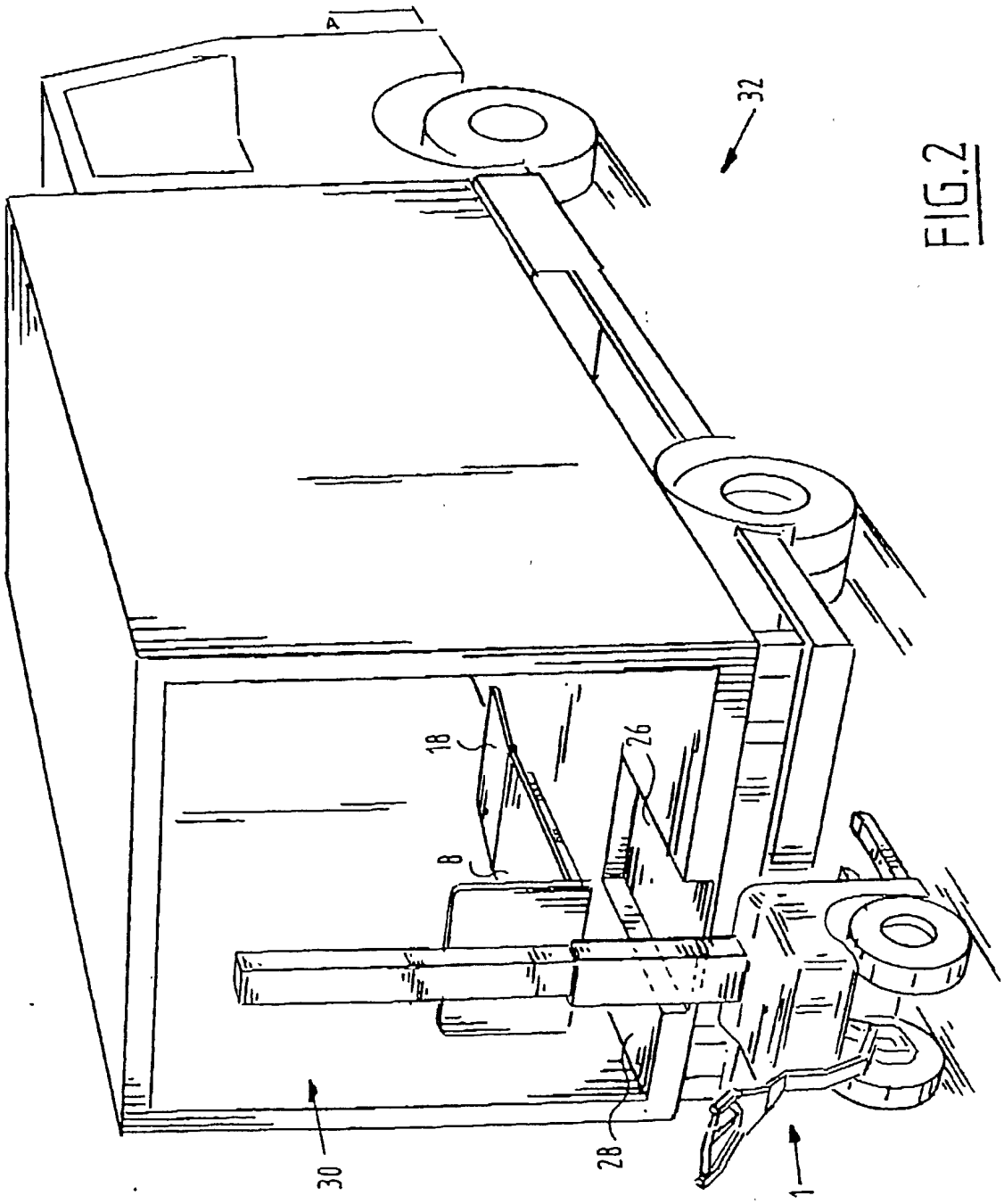


FIG.2

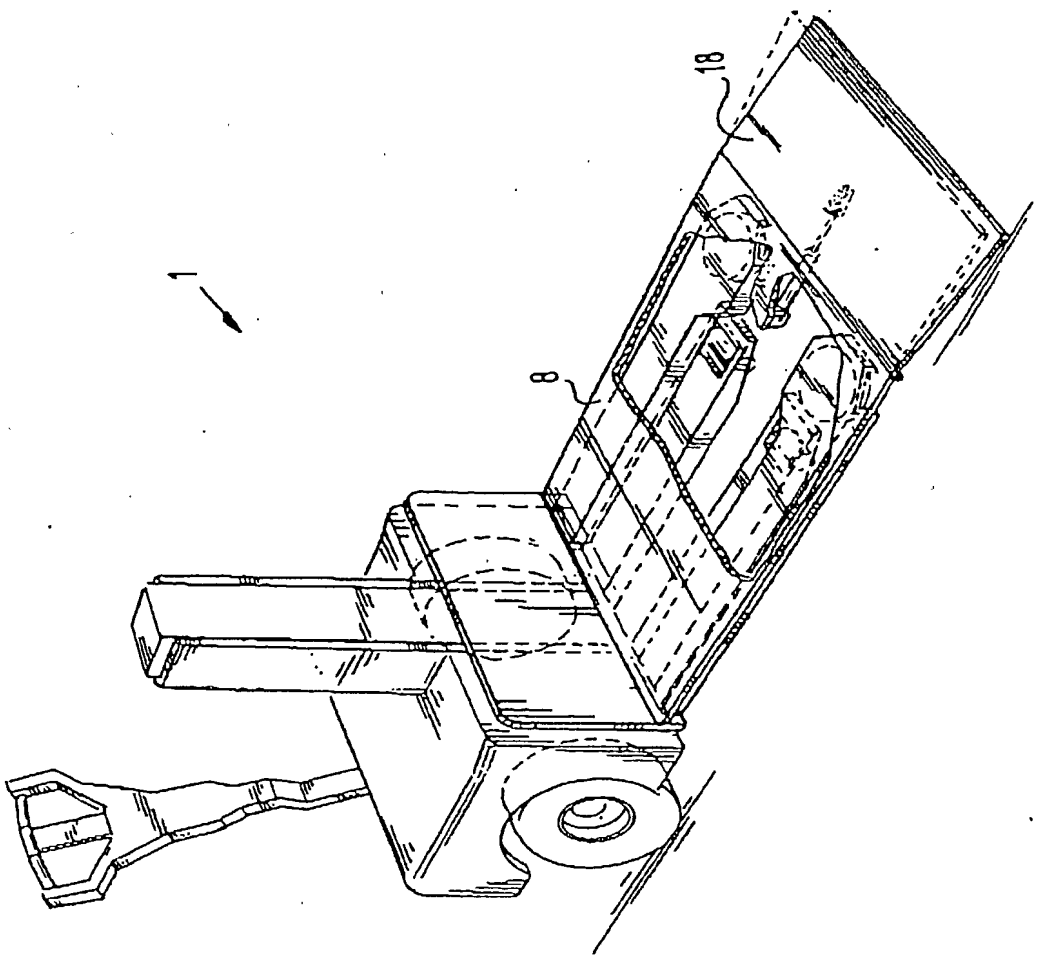


FIG.3

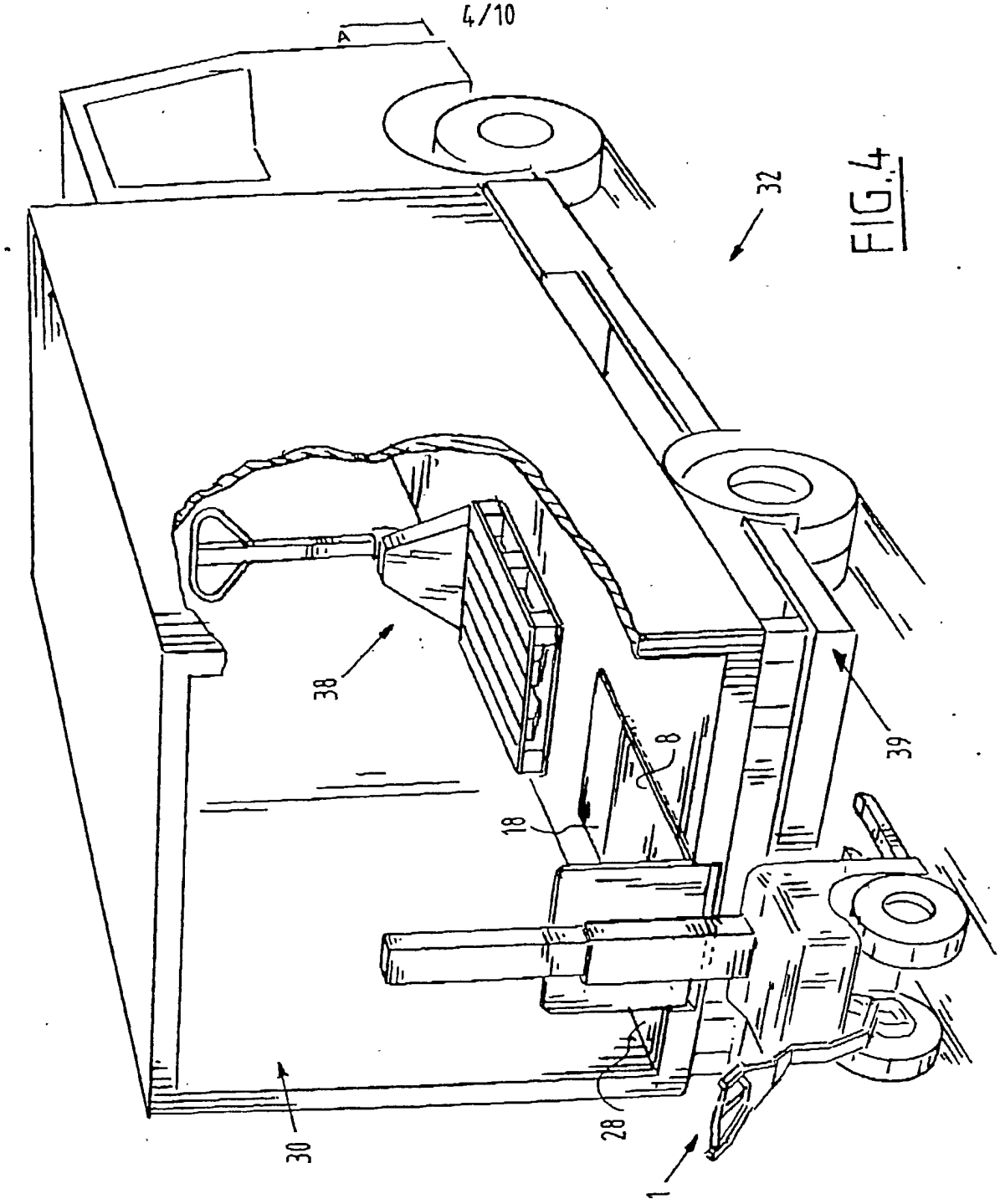
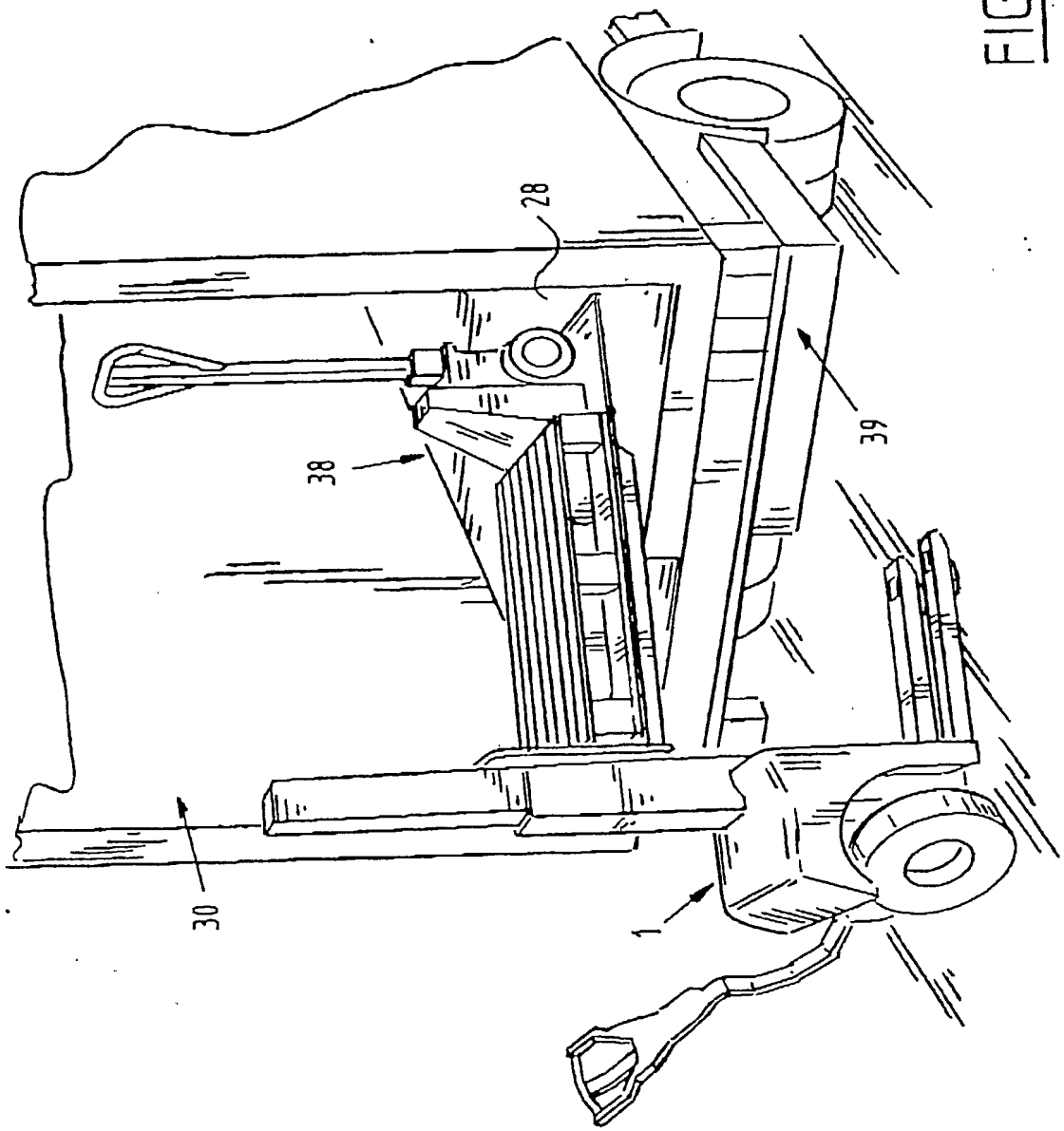


FIG.4

FIG.5



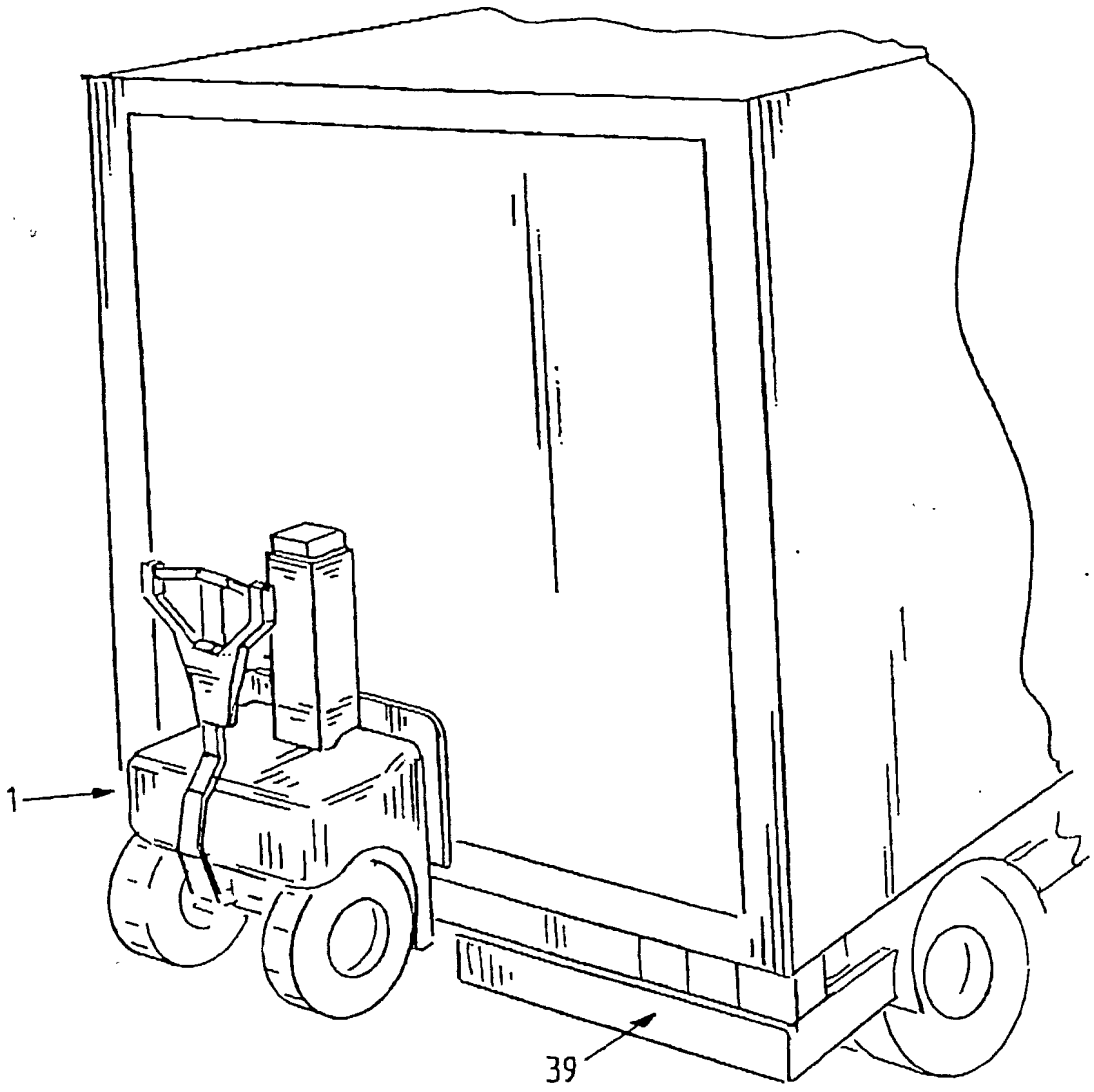


FIG.6

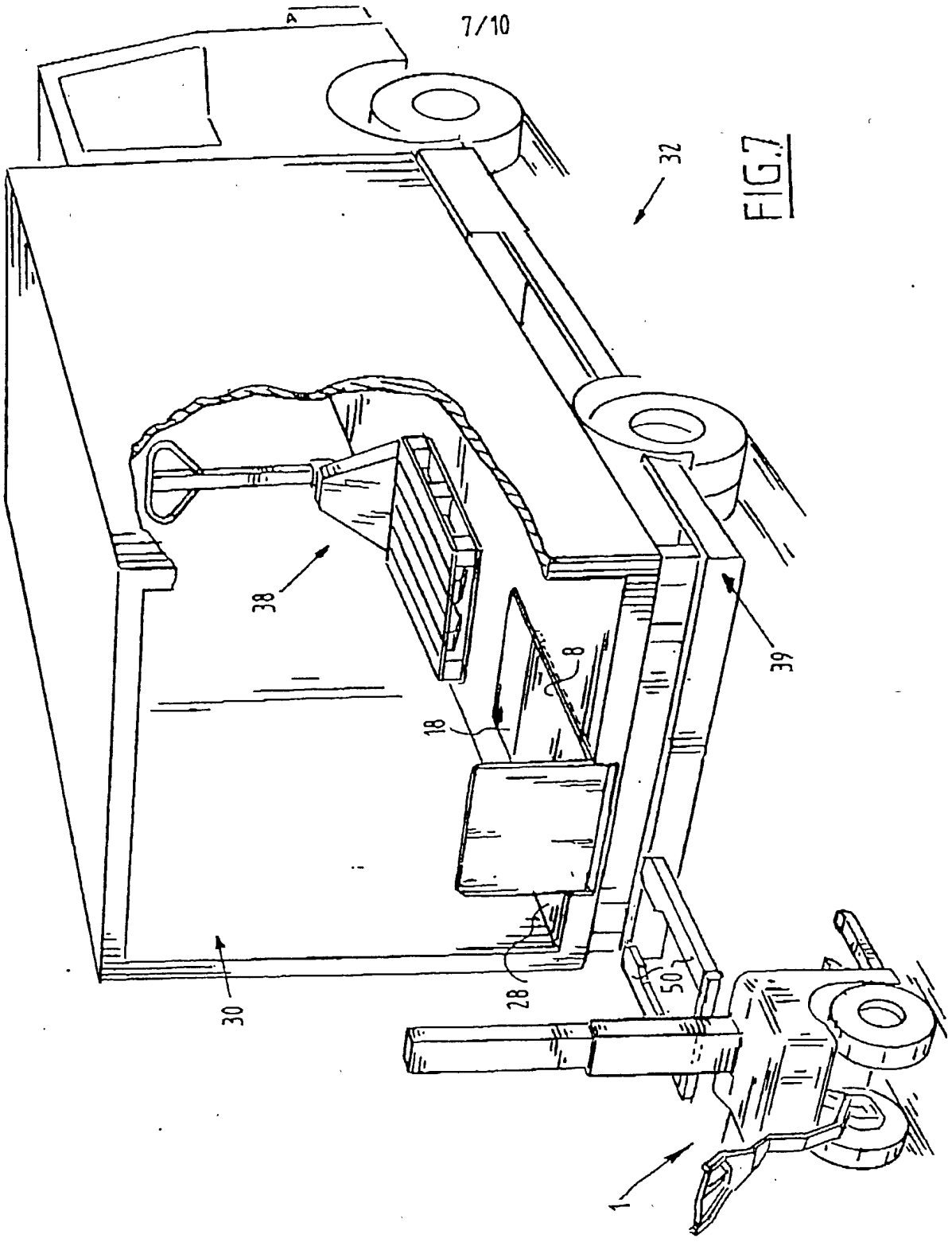


FIG.7

FIG.8

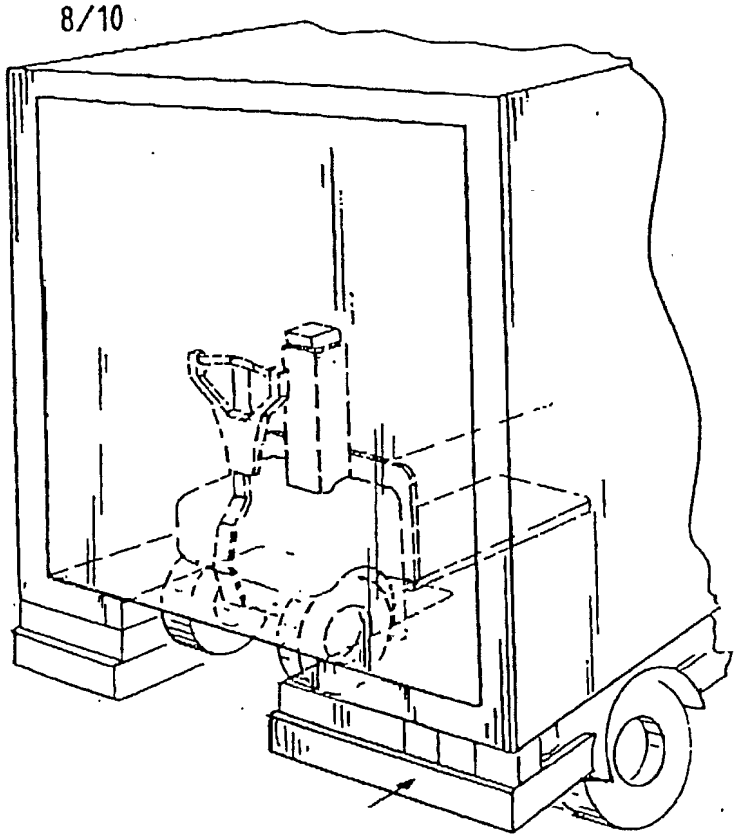
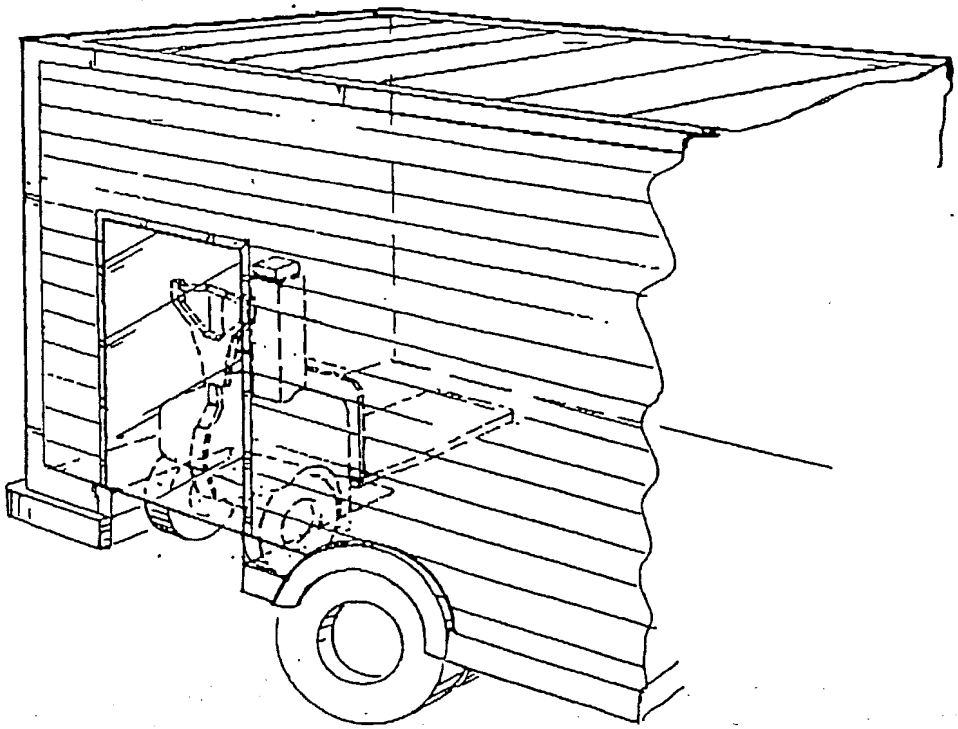


FIG.9



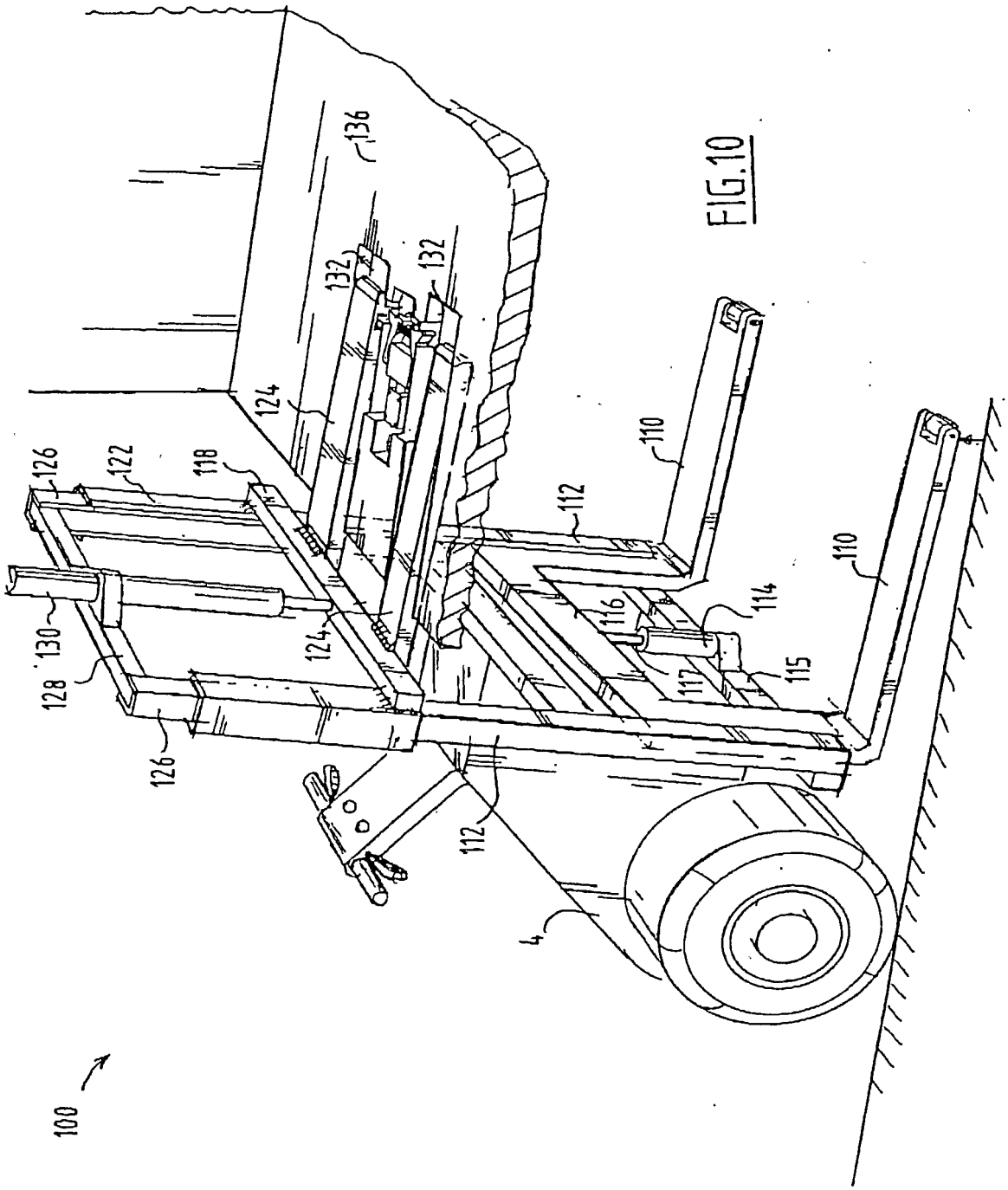


FIG.10

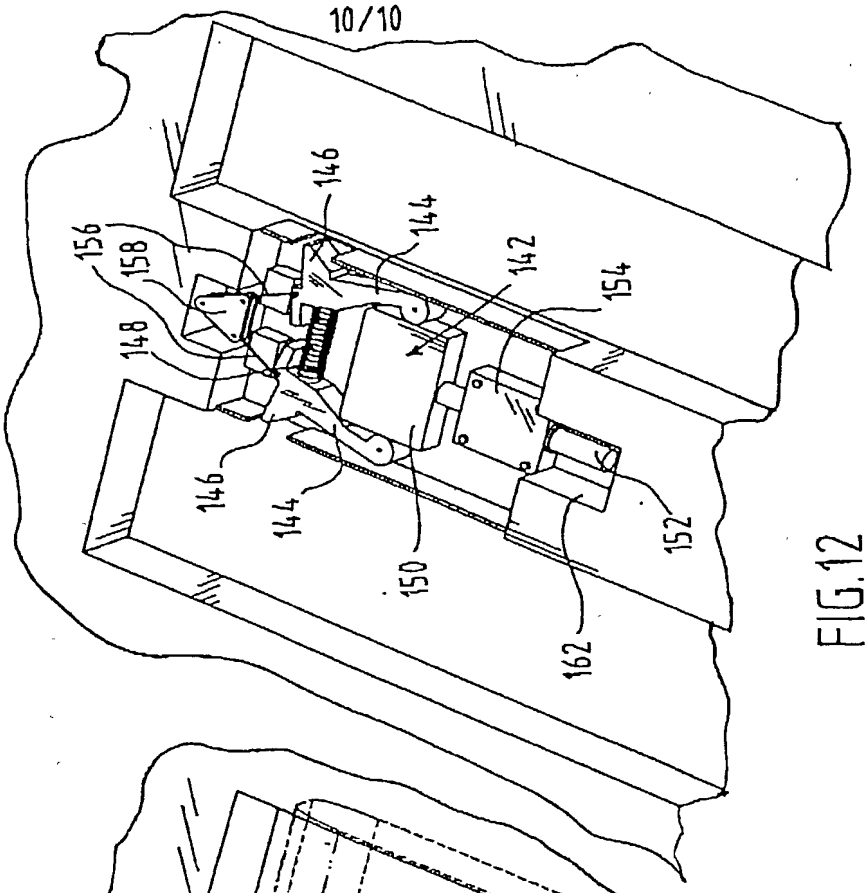

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FIG.12

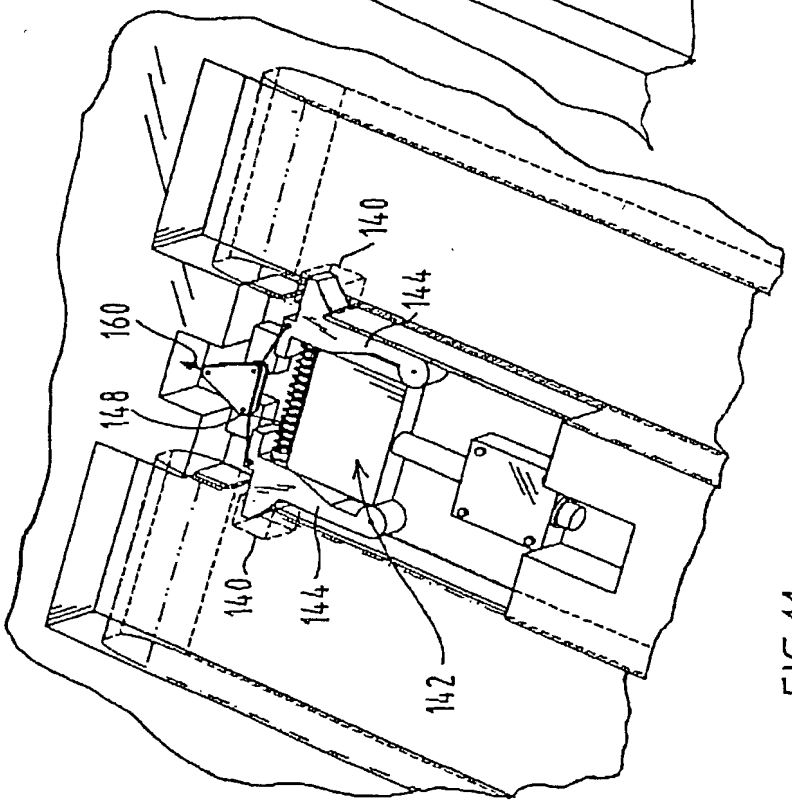
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FIG.11

Applicant or Patentee: Johannes VAN VUUREN
Harmelerwaard Patents B.V.
Serial or Patent No.: 10/088,701
Filed or Issued:
For: DISPLACEABLE LOADING/UNLOADING TRANSPORTER

Attorney's Docket No.: 702-020501

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9 (f) and 1.27 (c)) — SMALL BUSINESS CONCERN

I hereby declare that I am

[x] the owner of the small business concern identified below:

[ ] an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN Harmelerwaard Patents B.V.

ADDRESS OF CONCERN Harmelerwaard 21, NL-3481 LC HARMELEN

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9 (d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled DISPLACEABLE LOADING/UNLOADING TRANSPORTER by inventor(s) Johannes van Vuuren described in

[ ] the specification filed herewith

[x] application serial no. 10/088,701, filed .

[ ] patent no. , issued .

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9 (d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9 (d) or a nonprofit organization under 37 CFR 1.9 (e).

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME
ADDRESS
[ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

NAME
ADDRESS
[ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Johannes Van Vuuren
TITLE OF PERSON OTHER THAN OWNER
ADDRESS OF PERSON SIGNING

SIGNATURE x DATE 20th-03-2002

Declaration and Power of Attorney For Patent Application

English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Displaceable Loading/Unloading Transporter,

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on March 21, 2002 as

Application Serial No. 10/088,701

and was amended on March 21, 2002 (if applicable).

and was filed as PCT/NL00/00682 on 22 September 2000

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability of this application in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
NL 1013108	NL	22 September 1999	☒	☐
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
			☐	☐
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
			☐	☐
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

PCT/NL00/00682	22 September 2000	pending
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. *(list name and registration number)*

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Russell D. Orkin	25,363	Paul M. Reznick	33,059	Randall A. Notzen	36,882
David C. Hanson	23,024	John W. McIlvaine	34,219	Jesse A. Hirshman	40,016
Richard L. Byrne	28,498	Michael I. Shamos	30,424	James G. Porcelli	33,757
Frederick B. Ziesenheim	19,438	Blynn L. Shideler	35,034	Kent E. Baldauf,Jr.	36,082
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Inventor's signature	Date 20/03/2002
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Full name of second joint inventor, if any	
Second inventor's signature	Date
Residence	
Citizenship	
Post Office Address	

(Supply similar information and signature for third and subsequent joint inventors.)